

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2000

BUDGET ACTIVITY

PE NUMBER AND TITLE

05 - Engineering and Manufacturing Development**0604602F Armament/Ordnance Development**

| COST (\$ in Thousands) | FY 1999 Actual | FY 2000 Estimate | FY 2001 Estimate | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | Cost to Complete | Total Cost |
|---|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|
| Total Program Element (PE) Cost | 11,215 | 23,567 | 8,876 | 1,355 | 1,388 | 1,415 | 1,442 | Continuing | TBD |
| 653133 Bombs & Fuzes | 9,935 | 22,257 | 7,551 | 0 | 0 | 0 | 0 | Continuing | TBD |
| 654696 Armament Standardization Program | 1,151 | 1,176 | 1,194 | 1,223 | 1,253 | 1,275 | 1,298 | Continuing | TBD |
| 655613 Containers | 129 | 134 | 131 | 132 | 135 | 140 | 144 | Continuing | TBD |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Continuing | TBD |

(U) A. Mission Description

The Armament Ordnance Development program provides for initial and continuing development of munition equipment for support and operational use.

Armament Standardization/Control/Munitions Material Handling Equipment (MMHE): This continuing project develops and improves the standardization and commonality of munitions handling and armament equipment to preclude duplication. This project's efforts are limited to the study, design, and development, of MMHE and armament control systems. Procurement will be performed and funded by the applicable weapons system project.

Bombs and Fuzes: This project develops and improves conventional bombs and fuzes. It currently includes the development of the Hard Target Smart Fuze (HTSF). Miniaturized Munitions Capability (MMC) continues the Concept Exploration phase in this project. Initial MMC funding will be used to explore concepts to meet CAF MNS 304-97, 'Miniaturized Munitions Capability'.

Containers: This project funds the operation of the tri-service Container Design Retrieval System (CDRS). This maintains a container database to preclude proliferation and duplication of munitions containers. It also supports organic container design, acquisition transportation, prototyping, testing capabilities, as well as the Joint Ordnance Commander's Working Group (JOCG) for Packaging, Handling, and Loading.

(U) B. Budget Activity Justification

This program is in budget activity 5 - Engineering and Manufacturing Development because the projects support the EMD phase of several munitions related items and functions.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2000

BUDGET ACTIVITY

PE NUMBER AND TITLE

05 - Engineering and Manufacturing Development**0604602F Armament/Ordnance Development**(U) **C. Program Change Summary (\$ in Thousands)**

| | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> | <u>Total Cost</u> |
|---|----------------|----------------|----------------|-------------------|
| (U) Previous President's Budget (FY 2000 PBR) | 11,823 | 8,887 | 8,956 | TBD |
| (U) Appropriated Value | 12,037 | 23,887 | | TBD |
| (U) Adjustments to Appropriated Value | | | | |
| a. Congressional/General Reductions | -181 | -11 | | TBD |
| b. Small Business Innovative Research | -401 | | | TBD |
| c. Omnibus or Other Above Threshold Reprogram | | -160 | | TBD |
| d. Below Threshold Reprogram | -144 | | | TBD |
| e. Rescissions | -96 | -149 | | TBD |
| f. Other | | | | TBD |
| (U) Adjustments to Budget Years Since FY 2000 PBR | | | -80 | |
| (U) Current Budget Submit/FY 2001 PBR | 11,215 | 23,567 | 8,876 | TBD |

(U) **Significant Program Changes:**

A congressional add of \$15 million was appropriated for '...risk reduction efforts, determined appropriate by MMC system program officials, to accelerate development of a capability addressing both fixed and relocatable targets.'

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit) | | | | | | | | DATE February 2000 | |
|---|-------------------|---------------------|---------------------|--|---------------------|---------------------|---------------------|------------------------------|------------|
| BUDGET ACTIVITY 05 - Engineering and Manufacturing Development | | | | PE NUMBER AND TITLE 0604602F Armament/Ordnance Development | | | | PROJECT 653133 | |
| COST (\$ in Thousands) | FY 1999 Actual | FY 2000 Estimate | FY 2001 Estimate | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | Cost to Complete | Total Cost |
| 653133 Bombs & Fuzes | 9,935 | 22,257 | 7,551 | 0 | 0 | 0 | 0 | Continuing | TBD |
| <p>(U) <u>A. Mission Description</u> Bombs and Fuzes: This project develops and improves conventional bombs and fuzes including the development of the Hard Target Smart Fuze (HTSF). The HTSF is a layer counting and void sensing fuze that will be used with air-to-ground penetrator weapons. Miniaturized Munitions Capability (MMC) continues the Concept Exploration phase in this project.</p> <p>(U) <u>FY 1999 (\$ in Thousands)</u> (U) \$685 Conducted and completed HTSF System Requirements Review (SRR) (U) \$734 Conducted and completed HTSF Preliminary Design Review (PDR) (U) \$3,858 Completing HTSF Detailed Design (U) \$333 Initiated HTSF contractor test and evaluation (CT&E) (U) \$2,961 Conducted MMC AOA Modeling and Analysis (U) \$1,000 Conducted MMC Concept Exploration Contracts (U) \$364 Program Office Support (U) \$9,935 Total</p> <p>(U) <u>FY 2000 (\$ in Thousands)</u> (U) \$4,531 Conduct HTSF contractor test and evaluation (CT&E) (U) \$3,030 Initiate HTSF combined developmental and initial operational test and evaluation (DT/IOT&E) (U) \$5,200 Conduct and complete MMC Concept Exploration Contracts (U) \$3,741 Conduct and complete MMC AOA Modeling and Analysis (U) \$755 Program Office Support (U) \$5,000 Fixed Target MMC Risk Reduction (U) \$22,257 Total</p> | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> Project 653133 Page 3 of 14 Pages Exhibit R-2A (PE 0604602F) </div> | | | | | | | | | |

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit) | | DATE February 2000 |
| BUDGET ACTIVITY 05 - Engineering and Manufacturing Development | PE NUMBER AND TITLE 0604602F Armament/Ordnance Development | |
| | | PROJECT 653133 |

(U) **A. Mission Description Continued**

(U) FY 2001 (\$ in Thousands)

| | |
|-------------|---|
| (U) \$1,786 | Complete Hard Target Smart Fuze (HTSF) Functional Configuration Audit |
| (U) \$5,308 | Complete combined HTSF developmental and initial operational test and evaluation (DT/IOT&E) |
| (U) \$457 | Support HTSF dedicated initial operational testing and evaluation (IOT&E) |
| (U) \$7,551 | Total |

(U) **B. Project Change Summary**

\$15M FY00 Congressional add will be used 'for risk reduction efforts, determined most appropriate by MMC system program officials, to accelerate development of a capability addressing both fixed and relocatable targets.'

(U) **C. Other Program Funding Summary (\$ in Thousands)**

| | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>Cost to</u> | <u>Total Cost</u> |
|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| | <u>Actual</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Complete</u> | |
| (U) Procurement of Ammunition, Air Force, P-1 Line Item; Fuzes | | | | | | | | | |
| (U) PE 28030 WRM-Ammo | 5,299 | | 9,342 | 10,643 | 29,405 | 26,621 | 25,312 | | |
| (U) Hard Target Smart Fuze (HTSF) procurement funded by Defense Threat Reduction Agency (DTRA) | | 3,000 | 6,000 | 6,000 | 12,000 | | | | |

(U) **D. Acquisition Strategy**

The Hard Target Smart Fuze (HTSF) Acquisition Strategy was full and open competition for the EMD program with production options to meet performance specification requirements for current and future Hard Target munitions. The HTSF will be compatible with GBU-24, GBU-27, GBU-28, GBU-15, AGM-130, JDAM, JASSM, and future hard target munitions while providing increased reliability and emphasis on life cycle management. The HTSF program was augmented with Defense Threat Reduction Agency (DTRA) funding and requirements for additional HTSF applications and follow-on fuze procurement. Acquisition strategy for MMC activities are TBD.

(U) **E. Schedule Profile**

| | | | |
|--|----------------|----------------|----------------|
| | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> |
|--|----------------|----------------|----------------|

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit) | | | | | | | | | | DATE February 2000 | | | |
|--|---|--|---|--|--|---|--|---|---|--------------------------|---|--|---|
| BUDGET ACTIVITY 05 - Engineering and Manufacturing Development | | | | | PE NUMBER AND TITLE 0604602F Armament/Ordnance Development | | | | | PROJECT 653133 | | | |
| (U) <u>E. Schedule Profile Continued</u> | | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <u>FY 1999</u> 1 2 3 4 1 </div> <div style="text-align: center;"> <u>FY 2000</u> 2 3 4 1 </div> <div style="text-align: center;"> <u>FY 2001</u> 2 3 4 </div> </div> | | | | | | | | | | | | | |
| (U) Hard Target Smart Fuze (HTSF) | | | | | | | | | | | | | |
| (U) Start HTSF Detailed Design | | | | | | | | | | | | | |
| (U) System Requirement Review (SRR) | * | | | | | | | | | | | | |
| (U) Preliminary Design Review (PDR) | | | * | | | | | | | | | | |
| (U) Start HTSF CT&E | | | | | | X | | | | | | | |
| (U) Complete HTSF Detailed Design | | | | | | X | | | | | | | |
| (U) Complete CT&E | | | | | | | | | X | | | | |
| (U) Start DT&E/IOT&E | | | | | | | | X | | | | | |
| (U) Complete FCA | | | | | | | | | | X | | | |
| (U) Complete Combined DT&E/IOT&E | | | | | | | | | | | | | X |
| (U) Start/Complete Dedicated IOT&E | | | | | | | | | | | X | | X |
| (U) Miniaturized Munitions Capability | | | | | | | | | | | | | |
| (U) Start Concept Exploration/AoA | * | | | | | | | | | | | | |
| (U) Complete Concept Exploration/Analysis | | | | | | | | X | | | | | |
| * = Event occurred X = Event planned | | | | | | | | | | | | | |

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | DATE February 2000 | | | |
|---|--------------------|-------------------|-------------------|--|--------------------|----------------|-----------------------|---------------------------|------------------|----------------|
| BUDGET ACTIVITY | | | | PE NUMBER AND TITLE | | | | | PROJECT | |
| 05 - Engineering and Manufacturing Development | | | | 0604602F Armament/Ordnance Development | | | | | 653133 | |
| (U) <u>A. Project Cost Breakdown (\$ in Thousands)</u> | | | | | | | | | | |
| | | | | | | | FY 1999 | FY 2000 | | FY 2001 |
| (U) a. Contractor Total | | | | | | | 5,474 | 9,380 | | 1,506 |
| (U) b. Government | | | | | | | | | | |
| (U) Testing | | | | | | | 590 | 5,430 | | 3,908 |
| (U) Contractor support | | | | | | | 1,036 | 4,221 | | 500 |
| (U) Management support | | | | | | | 2,835 | 3,226 | | 1,637 |
| (U) Total | | | | | | | 9,935 | 22,257 | | 7,551 |
| (U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u> | | | | | | | | | | |
| (U) <u>Performing Organizations:</u> | | | | | | | | | | |
| <u>Contractor or</u> | <u>Contract</u> | | | | | | | | | |
| <u>Government</u> | <u>Method/Type</u> | <u>Award or</u> | <u>Performing</u> | <u>Project</u> | | | | | | |
| <u>Performing</u> | <u>or Funding</u> | <u>Obligation</u> | <u>Activity</u> | <u>Office</u> | <u>Total Prior</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget to</u> | <u>Total</u> |
| <u>Activity</u> | <u>Vehicle</u> | <u>Date</u> | <u>EAC</u> | <u>EAC</u> | <u>to FY 1999</u> | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> | <u>Complete</u> | <u>Program</u> |
| <u>Product Development Organizations</u> | | | | | | | | | | |
| Motorola (JPF) | CPAF | Jul 93 | 21,357 | 21,357 | 21,357 | 0 | 0 | 0 | 0 | 21,357 |
| Alliant (HTSF) | C/CPIF | Aug 98 | 16,010 | 16,010 | 1,100 | 4,474 | 4,180 | 1,506 | Continuing | TBD |
| Boeing (MMC) | FFP | Jan 99 | 250 | 250 | 0 | 250 | 1,300 | 0 | 0 | 1,550 |
| Lockheed (MMC) | FFP | Jan 99 | 250 | 250 | 0 | 250 | 1,300 | 0 | 0 | 1,550 |
| Raytheon (MMC) | FFP | Jan 99 | 250 | 250 | 0 | 250 | 1,300 | 0 | 0 | 1,550 |
| Northrup (MMC) | FFP | Jan 99 | 250 | 250 | 0 | 250 | 1,300 | 0 | 0 | 1,550 |
| <u>Support and Management Organizations</u> | | | | | | | | | | |
| HTSF TEAS/ TEAMS | Various | Various | N/A | N/A | 559 | 612 | 480 | 500 | Continuing | TBD |
| MMC TEAS/ TEAMS | Various | Various | N/A | N/A | 0 | 424 | 3,741 | 0 | 0 | 4,165 |
| JPF TEAS/TEAMS | Various | Various | N/A | N/A | 512 | 0 | 0 | 0 | 0 | 512 |
| ASC/WG (HTSF) | Various | Various | N/A | N/A | 1,174 | 165 | 1,076 | 1,637 | Continuing | TBD |
| ASC/WMX (MMC) | Various | Various | N/A | N/A | 0 | 1,620 | 2,150 | 0 | 0 | 3,770 |
| Other MMC | Various | Various | N/A | N/A | 0 | 1,050 | 0 | 0 | 0 | 1,050 |
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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | | DATE February 2000 | | |
|--|---------|--------|-----|-----|--|---------|---------|-----------------------|------------|---------|
| BUDGET ACTIVITY | | | | | PE NUMBER AND TITLE | | | | PROJECT | |
| 05 - Engineering and Manufacturing Development | | | | | 0604602F Armament/Ordnance Development | | | | 653133 | |
| (U) Performing Organizations Continued: | | | | | | | | | | |
| Test and Evaluation Organizations | | | | | | | | | | |
| 46th Test HTSF | Various | Mar 94 | N/A | N/A | 0 | 590 | 1,430 | 3,908 | Continuing | TBD |
| 46th test JPF | Various | Mar 94 | N/A | N/A | 3,315 | 0 | 0 | 0 | 0 | 3,315 |
| MMC Test | | | | | 0 | 0 | 4,000 | 0 | 0 | 4,000 |
| | | | | | Total Prior | Budget | Budget | Budget | Budget to | Total |
| Subtotals | | | | | to FY 1999 | FY 1999 | FY 2000 | FY 2001 | Complete | Program |
| Subtotal Product Development | | | | | 22,457 | 5,474 | 9,380 | 1,506 | TBD | TBD |
| Subtotal Support and Management | | | | | 2,245 | 3,871 | 7,447 | 2,137 | TBD | TBD |
| Subtotal Test and Evaluation | | | | | 3,315 | 590 | 5,430 | 3,908 | TBD | TBD |
| Total Project | | | | | 28,017 | 9,935 | 22,257 | 7,551 | TBD | TBD |

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit) | | | | | | | | DATE February 2000 | |
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| BUDGET ACTIVITY 05 - Engineering and Manufacturing Development | | | | PE NUMBER AND TITLE 0604602F Armament/Ordnance Development | | | | PROJECT 654696 | |
| COST (\$ in Thousands) | FY 1999 Actual | FY 2000 Estimate | FY 2001 Estimate | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | Cost to Complete | Total Cost |
| 654696 Armament Standardization Program | 1,151 | 1,176 | 1,194 | 1,223 | 1,253 | 1,275 | 1,298 | Continuing | TBD |
| <p>(U) <u>A. Mission Description</u> Armament Standardization/Control/Munitions Material Handling Equipment (MMHE): This continuing project develops and improves the standardization and commonality of improved munitions handling and armament equipment to preclude duplication. This project's efforts are limited to the study, design, and development, of MMHE and armament control systems. Procurement will be performed and funded by the applicable weapons system project.</p> <p>(U) <u>FY 1999 (\$ in Thousands)</u></p> <p>(U) \$592 Designed, prototyped, and tested various MMHE projects, i.e. T-2 Pallet Lock Device, B-52 Loading Adapter, AGM-84 Loading Adapter, M61 Gun Firing Stand, All-Up-Round-Container (AURC) Dolly, MJ-1 Platform, Trailer Stabilizer Jack, Flare Squibbing Fixture, B-1B Practice Bomb Rack Adapter, Missile Dislodge Tools, Alternate Mission Equipment (AME) Maintenance Stand, and ADU-537 Loading Adapter Upgrade. Completed development of B-52 Yoke Handling Fixture, B-52 Pylon Transport Adapter, MHU-83 Remote Control Upgrade, MJ-40 Hydraulics Upgrade, Tire Liner Inserts, Ammo Loader Forklift Adapter, AIM-9X Lifting Bar, ALA-17 Flare Assembly Fixture and AURC Lift Adapter.</p> <p>(U) \$265 Continued design and testing of Aluminum Rail Set and evaluation of Next Generation Munitions Handler.</p> <p>(U) \$98 Initiated design, prototype and test of ALE-50 Flare Transport Module (Kosovo war effort)</p> <p>(U) \$98 Completed evaluation of B-1B Rotary Launcher Adapter.</p> <p>(U) \$98 Initiated design of MHU-110 Trailer Upgrade.</p> <p>(U) \$1,151 Total</p> <p>(U) <u>FY 2000 (\$ in Thousands)</u></p> <p>(U) \$585 Design, prototype, and test various MMHE projects, i.e., Flightline Service Cart, F-16 Pylon Load Adapter, B-52 Loading Adapter, AGM-84 Loading Adapter, Practice Bomb Transport Module and ADU-537 Upgrade. Complete development of T-2 Pallet Lock Device, M61 Gun Firing Stand, AURC) Dolly, MJ-1 Platform, Trailer Stabilizer Jack, Flare Squibbing Fixture, AME Maintenance Stand, B-1B Practice Bomb Rack Adapter and Missile Dislodge Tools.</p> <p>(U) \$295 Complete development of Aluminum Rail Set and continue evaluation of Next Generation Munitions Handler.</p> <p>(U) \$74 Complete development of ALE-50 Flare Transport Module.</p> <p>(U) \$49 Complete development of B-1B Rotary Launcher Adapter.</p> <p>(U) \$73 Complete development of Joint JASSM Handling Adapters.</p> <p>(U) \$100 Initiate development of Next Generation Munitions Handling Trailer.</p> | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> Project 654696 Page 8 of 14 Pages Exhibit R-2A (PE 0604602F) </div> | | | | | | | | | |

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| BUDGET ACTIVITY 05 - Engineering and Manufacturing Development | | | | PE NUMBER AND TITLE 0604602F Armament/Ordnance Development | | | PROJECT 654696 | |

(U) **A. Mission Description Continued**

(U) **FY 2000 (\$ in Thousands) Continued**

(U) \$1,176 Total

(U) **FY 2001 (\$ in Thousands)**

(U) \$449 Design, prototype, and test various MMHE projects, i.e., MJ-1 Table Modification, Triple Ejector Rack (TER) Storage Stand, AME Mobility Rack, Chaff/Flare Transport Module and Practice Bomb Transport Module. Complete development ADU-537 Upgrade, Flightline Service Cart, F-16 Pylon Load Adapter, B-52 Loading Adapter, AGM-84 Loading Adapter, and Missile Dislodge Tools.

(U) \$220 Continue evaluation of Next Generation Munitions Handler.

(U) \$100 Continue evaluation of a MHU-110 Trailer Upgrade

(U) \$25 Continue evaluation of a Mobile Bomb Renovation Plant

(U) \$150 Initiate development of ISO Munitions Pallet.

(U) \$250 Continue development of Next Generation Munitions Handling Trailer.

(U) \$1,194 Total

(U) **B. Project Change Summary**

(U) **C. Other Program Funding Summary (\$ in Thousands)**

| | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>Cost to</u> | <u>Total Cost</u> |
|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| | <u>Actual</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Complete</u> | |
| (U) AF RDT&E | | | | | | | | | |
| (U) Other APPN | | | | | | | | | |

(U) **D. Acquisition Strategy**

MMHE is a continuing effort program with activities contracted through Military Interdepartmental Purchase Requests (MIPR). Procurement will be performed and funded by the applicable equipment project.

(U) **E. Schedule Profile**

| | <u>FY 1999</u> | | | | <u>FY 2000</u> | | | | <u>FY 2001</u> | | | |
|---------|----------------|---|---|---|----------------|---|---|---|----------------|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| (U) N/A | | | | | | | | | | | | |

Not Applicable. MMHE does not execute in accordance with standard acquisition milestones. Project activities are performed on a continuing basis

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | DATE February 2000 | | | |
|---|--|--------------------|-------------------|-------------------|---|--------------------|-----------------------|----------------|---------------------------|------------------|
| BUDGET ACTIVITY | | | | | PE NUMBER AND TITLE | | | | PROJECT | |
| 05 - Engineering and Manufacturing Development | | | | | 0604602F Armament/Ordnance Development | | | | 654696 | |
| (U) | <u>A. Project Cost Breakdown (\$ in Thousands)</u> | | | | | | | | | |
| | | | | | <u>FY 1999</u> | | <u>FY 2000</u> | | <u>FY 2001</u> | |
| (U) | Various MMHE Projects | | | | 486 | | 431 | | 449 | |
| (U) | Aluminum Rail Set | | | | 75 | | 75 | | 0 | |
| (U) | Next Generation Munitions Handler | | | | 190 | | 220 | | 220 | |
| (U) | Next Generation Munitions Handling Trailer | | | | 0 | | 100 | | 250 | |
| (U) | ISO Munitions Pallet | | | | 0 | | 0 | | 150 | |
| (U) | B-1B Rotary Launcher Adapter | | | | 100 | | 50 | | 0 | |
| (U) | MHU-110 Trailer Upgrade | | | | 100 | | 50 | | 25 | |
| (U) | MHU-83 Upgrade | | | | 0 | | 0 | | 0 | |
| (U) | MJ-40 Upgrade | | | | 0 | | 0 | | 0 | |
| (U) | Mobile Bomb Renovation Plant | | | | 0 | | 100 | | 100 | |
| (U) | ALE-50 Transport Module | | | | 100 | | 75 | | 0 | |
| (U) | JASSM Handling Adapters | | | | 100 | | 75 | | 0 | |
| (U) | Total | | | | 1,151 | | 1,176 | | 1,194 | |
| (U) | <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u> | | | | | | | | | |
| (U) | <u>Performing Organizations:</u> | | | | | | | | | |
| | <u>Contractor or</u> | <u>Contract</u> | | | | | | | | |
| | <u>Government</u> | <u>Method/Type</u> | <u>Award or</u> | <u>Performing</u> | <u>Project</u> | | | | | |
| | <u>Performing</u> | <u>or Funding</u> | <u>Obligation</u> | <u>Activity</u> | <u>Office</u> | <u>Total Prior</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget to</u> |
| | <u>Activity</u> | <u>Vehicle</u> | <u>Date</u> | <u>EAC</u> | <u>EAC</u> | <u>to FY 1999</u> | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> | <u>Complete</u> |
| | <u>Product Development Organizations</u> | | | | | | | | | |
| | Dept. of Energy/NASA | MIPR | | | | 560 | 190 | 224 | 220 | Continuing |
| | <u>Support and Management Organizations</u> | | | | | | | | | |
| | TEAS/TAMS | MIPR | Oct 99 | N/A | N/A | 935 | 615 | 612 | 634 | Continuing |
| | AFDTC/FM | MIPR | Oct 99 | N/A | N/A | 240 | 125 | 125 | 125 | Continuing |
| | 64SSUPS/LGS | MIPR | Cont. | N/A | N/A | 100 | 46 | 40 | 40 | Continuing |
| | WL/MN | MIPR | Cont. | N/A | N/A | 80 | 25 | 25 | 25 | Continuing |
| | <u>Test and Evaluation Organizations</u> | | | | | | | | | |
| | 46th Test Wing | MIPR | Cont. | N/A | N/A | 250 | 150 | 150 | 150 | Continuing |
| Project 654696 | | | | | Page 10 of 14 Pages | | | | Exhibit R-3 (PE 0604602F) | |

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | DATE February 2000 | | |
|--|--------------------|-------------------|-----------------|--|----------------|----------------|-----------------------|------------------|----------------|
| BUDGET ACTIVITY | | | | PE NUMBER AND TITLE | | | | PROJECT | |
| 05 - Engineering and Manufacturing Development | | | | 0604602F Armament/Ordnance Development | | | | 654696 | |
| (U) <u>Government Furnished Property:</u> | | | | | | | | | |
| | <u>Contract</u> | | | | | | | | |
| | <u>Method/Type</u> | <u>Award or</u> | | | | | | | |
| <u>Item</u> | <u>or Funding</u> | <u>Obligation</u> | <u>Delivery</u> | <u>Total Prior</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget to</u> | <u>Total</u> |
| <u>Description</u> | <u>Vehicle</u> | <u>Date</u> | <u>Date</u> | <u>to FY 1999</u> | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> | <u>Complete</u> | <u>Program</u> |
| <u>Product Development Property</u> | | | | | | | | | |
| N/A | | | | | | | | | |
| <u>Support and Management Property</u> | | | | | | | | | |
| <u>Test and Evaluation Property</u> | | | | | | | | | |
| | | | | <u>Total Prior</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget</u> | <u>Budget to</u> | <u>Total</u> |
| <u>Subtotals</u> | | | | <u>to FY 1999</u> | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> | <u>Complete</u> | <u>Program</u> |
| Subtotal Product Development | | | | 560 | 190 | 224 | 220 | TBD | TBD |
| Subtotal Support and Management | | | | 1,355 | 811 | 802 | 824 | TBD | TBD |
| Subtotal Test and Evaluation | | | | 250 | 150 | 150 | 150 | TBD | TBD |
| Total Project | | | | 2,165 | 1,151 | 1,176 | 1,194 | TBD | TBD |

Project 654696

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Exhibit R-3 (PE 0604602F)

UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit) | | | | | | | | DATE February 2000 | |
|--|---|---------------------|---------------------|--|---------------------|---------------------|---------------------|------------------------------|------------|
| BUDGET ACTIVITY 05 - Engineering and Manufacturing Development | | | | PE NUMBER AND TITLE 0604602F Armament/Ordnance Development | | | | PROJECT 655613 | |
| COST (\$ in Thousands) | FY 1999 Actual | FY 2000 Estimate | FY 2001 Estimate | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | Cost to Complete | Total Cost |
| 655613 Containers | 129 | 134 | 131 | 132 | 135 | 140 | 144 | Continuing | TBD |
| <p>(U) <u>A. Mission Description</u> Containers: This project funds the operation of the tri-service Container Design Retrieval System (CDRS). This system includes the maintenance of a container database to preclude proliferation and duplication of munitions containers. It also supports organic container design, prototyping, testing capabilities, as well as the Joint Ordnance Commander's Working Group (JOCG) for Packaging, Handling, and Loading. This project's efforts are limited to study, design, and development of container systems. The project also provides world wide acquisition transportation support and participates in Tri-Service groups and organizations for packaging, handling, logistic and transportation. Any procurement will be performed and funded by the applicable weapons system project.</p> | | | | | | | | | |
| (U) <u>FY 1999 (\$ in Thousands)</u> | | | | | | | | | |
| (U) \$5 | Initiated/continued/completed design/development of various CDRS projects, including a modular mobility container system, and special projects. | | | | | | | | |
| (U) \$5 | Provided container design expertise, management, and technical support to programs such as AIM-9X, JASSM, AMRAAM, AGM-142, JDAM, AGM-130, and WCMD. | | | | | | | | |
| (U) \$119 | Managed and operate the CDRS data base and support service. | | | | | | | | |
| (U) \$129 | Total | | | | | | | | |
| (U) <u>FY 2000 (\$ in Thousands)</u> | | | | | | | | | |
| (U) \$5 | Initiate/continue/complete design/development of various CDRS projects, including a modular mobility container system, and special projects. | | | | | | | | |
| (U) \$5 | Provide container design expertise, management, and technical support to programs such as AIM-9X, JASSM, AMRAAM, AGM-142, JDAM, AGM-130, and WCMD. | | | | | | | | |
| (U) \$124 | Manage and operate the CDRS data base and support service. | | | | | | | | |
| (U) \$134 | Total | | | | | | | | |
| (U) <u>FY 2001 (\$ in Thousands)</u> | | | | | | | | | |
| (U) \$5 | Initiate/continue/complete design/development of various CDRS projects, including a modular mobility container system, and special projects. | | | | | | | | |
| (U) \$5 | Provide container design expertise, management, and technical support to programs such as AIM-9X, JASSM, AMRAAM, AGM-142, JDAM, AGM-130, and WCMD. | | | | | | | | |
| (U) \$121 | Manage and operate the CDRS data base and support service. | | | | | | | | |
| (U) \$131 | Total | | | | | | | | |
| Project 655613 | | | | | | | | | |

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)

DATE

February 2000

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

05 - Engineering and Manufacturing Development

0604602F Armament/Ordnance Development

655613

(U) **B. Project Change Summary**

No significant program changes.

(U) **C. Other Program Funding Summary (\$ in Thousands)**

| | <u>FY 1999</u> | <u>FY 2000</u> | <u>FY 2001</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>Cost to</u> | <u>Total Cost</u> |
|--|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| | <u>Actual</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Complete</u> | |

(U) Not Applicable

(U) **D. Acquisition Strategy**

Not Applicable

(U) **E. Schedule Profile**

| | <u>FY 1999</u> | | | | <u>FY 2000</u> | | | | <u>FY 2001</u> | | | |
|--|----------------|---|---|---|----------------|---|---|---|----------------|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |

(U) Not Applicable.

Not Applicable. The Containers project does not execute in accordance with standard acquisition milestones. Design and support efforts are performed on a continuing basis.

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | | DATE February 2000 | | | | |
|---|--|--------------------|--|-------------------|--|-------------------|----------------|-----------------------|----------------|--------------------|----------------|--|
| BUDGET ACTIVITY | | | | | PE NUMBER AND TITLE | | | | PROJECT | | | |
| 05 - Engineering and Manufacturing Development | | | | | 0604602F Armament/Ordnance Development | | | | 655613 | | | |
| (U) <u>A. Project Cost Breakdown (\$ in Thousands)</u> | | | | | | | | | | | | |
| | | | | | <u>FY 1999</u> | | <u>FY 2000</u> | | <u>FY 2001</u> | | | |
| (U) Travel/Transportation | | | | | 70 | | 72 | | 70 | | | |
| (U) Supplies/Equipment | | | | | 49 | | 52 | | 51 | | | |
| (U) Mission Support | | | | | 10 | | 10 | | 10 | | | |
| (U) Total | | | | | 129 | | 134 | | 131 | | | |
| (U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u> | | | | | | | | | | | | |
| (U) <u>Performing Organizations:</u> | | | | | | | | | | | | |
| <u>Contractor or</u> | | <u>Contract</u> | | | | | | | | | | |
| <u>Government</u> | | <u>Method/Type</u> | | <u>Award or</u> | | <u>Performing</u> | | <u>Project</u> | | | | |
| <u>Performing</u> | | <u>or Funding</u> | | <u>Obligation</u> | | <u>Activity</u> | | <u>Office</u> | | <u>Total Prior</u> | | |
| <u>Activity</u> | | <u>Vehicle</u> | | <u>Date</u> | | <u>EAC</u> | | <u>EAC</u> | | <u>to FY 1999</u> | | |
| <u>Product Development Organizations</u> | | | | | | | | | | | | |
| Not Applicable | | | | | | | | | | | | |
| <u>Support and Management Organizations</u> | | | | | | | | | | | | |
| Sverdrup (TEAS) | | Various | | Oct 93 | | N/A | | N/A | | 1,455 | | |
| ASC/YHS | | Various | | Various | | N/A | | N/A | | 578 | | |
| Other | | Various | | Various | | N/A | | N/A | | 569 | | |
| <u>Test and Evaluation Organizations</u> | | | | | | | | | | | | |
| 46th Test Wing | | Various | | Various | | N/A | | N/A | | 190 | | |
| | | | | | <u>Total Prior</u> | | <u>Budget</u> | | <u>Budget</u> | | <u>Budget</u> | |
| | | | | | <u>to FY 1999</u> | | <u>FY 1999</u> | | <u>FY 2000</u> | | <u>FY 2001</u> | |
| <u>Subtotals</u> | | | | | | | | | | | | |
| Subtotal Product Development | | | | | | | | | | | | |
| Subtotal Support and Management | | | | | 2,602 | | 129 | | 134 | | 131 | |
| Subtotal Test and Evaluation | | | | | 190 | | 0 | | 0 | | 0 | |
| Total Project | | | | | 2,792 | | 129 | | 134 | | 131 | |

Project 655613

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Exhibit R-3 (PE 0604602F)